

Notice of Allowability

Application No.

10/678,847

Examiner

Tanh Q. Nguyen

Applicant(s)

SLEEMAN, PETER T.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed October 10, 2006.
2. ☒ The allowed claim(s) is/are 1,3-16,19 and 20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. ☐ Notice of References Cited (PTO-892) | 5. ☐ Notice of Informal Patent Application |
| 2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. ☒ Examiner's Amendment/Comment |
| 4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. ☒ Examiner's Statement of Reasons for Allowance |
| | 9. ☐ Other _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 10, 2006 has been entered.

Election/Restrictions

2. This application contains claims directed to the following patentably distinct species:

Species I (claims 1, 3-16, 19, 20), directed to serial data communication concurrently operable with auxiliary parallel data communication.

Species II (claim 17), directed to auxiliary parallel data communication bypassing serial data communication.

The species are independent or distinct because Species II does not require serial data communication to be concurrently operable with auxiliary parallel data communication.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

3. During a telephone conversation with the attorney for applicant, Don W. Bulson

(Reg. No. 28,192) on October 24, 2006, a provisional election was made without traverse to prosecute the invention of Species I, claims 1, 3-16, 19, 20.

Claim 17 is withdrawn from further consideration by the examiner as being drawn to a non-elected invention - see 37 CFR 1.142(b).

EXAMINER'S AMENDMENT

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in telephone interviews with the attorney for applicant, Don W. Bulson (Reg. No. 28,192) on October 24, 2006 and October 27, 2006 to clarify the scope of the claims and correct minor informalities.

The application has been amended as follows:

1. **(Currently Amended) An interface device for enabling communications between a host and a subsystem, comprising:**
 - (a) a register set consisting of a plurality of standard UART registers, the register set being configurable to control host-subsystem communications ~~according to a UART standard~~;
 - (b) a host interface configurable to establish data communication with the host;
 - (c) a serial interface configurable to establish a bi-directional serial data

communication channel to the subsystem under control of the register set; and

(d) a parallel interface configurable to establish an auxiliary parallel data communication channel to the subsystem, the parallel data communication channel being operable in conjunction with the serial data communication channel, wherein the parallel interface operates under control of the register set.

12. (Currently Amended) A card comprising an interface device according to claim 1 integrated with the ~~a~~ subsystem.

Cancelled claim 17.

19. (Currently Amended) An interface device for enabling communications between a host and a subsystem, comprising:

(a) a register set comprising of a plurality of registers, wherein each of the plurality of registers is a standard UART register and wherein the register set is configurable to control host-subsystem communications ~~according to a UART standard;~~

(b) a host interface configurable to establish data communication with the host;

(c) a serial interface configurable to establish a bi-directional serial data communication channel to the subsystem under control of the register set; and

(d) a parallel interface configurable to establish an auxiliary parallel data

communication channel to the subsystem, the parallel data communication channel being operable concurrently with the serial data communication channel, wherein the parallel interface operates under control of the register set.

20. (Currently Amended) A method of communicating data between a host and a subsystem, comprising:

(a) establishing a bi-directional serial data communication link with the subsystem under control of a register set, the register set comprising a plurality of registers wherein each of the plurality of registers is a standard UART register conforming to a UART standard;

(b) establishing an auxiliary parallel data communication link with the subsystem also under control of the register set, and the auxiliary parallel data communication link being operable concurrently with the serial data communication link; and

(c) transferring data over the auxiliary parallel data communication link to bypass the serial data communication link.

Allowable Subject Matter

5. The following is an examiner's statement of reasons for allowance: The prior art individually does not teach establishing a bidirectional serial data communication channel/link under the control of a register set and establishing an auxiliary parallel data communication channel/link also under the control of the register set, the register set

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consisting of a plurality of UART registers (or comprising a plurality of registers, with each of the plurality of registers being a standard UART register), wherein the auxiliary parallel data communication channel/link is operable concurrently (or in conjunction) with the serial data communication channel channel/link.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Q. Nguyen whose telephone number is 571-272-4154. The examiner can normally be reached on M-F 9:30AM-7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on 571-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

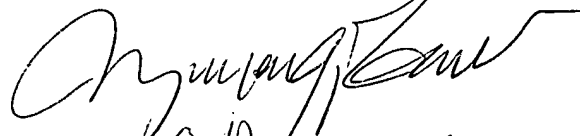
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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TANH Q NGUYEN
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100



October 25, 2006

TQN
October 25, 2006